From: tgablehouse@gcgllc.com

Sent: Friday, September 22, 2017 9:42 AM

Subject: CSB has released photos of the fire aftermath at Arkema in Houston

Attachments: Photos of Arkema Plant aftermath.pdf

Timothy R Gablehouse 303.572.0050 | 800.818.0050

Energy and Environment

These stark photos show the charred aftermath of the Texas chemical fire that ignited after Harvey

By Steven Mufson and Brady Dennis September 19



The charred remains of trailers that contained organic peroxide products that burned during the fires at the Arkema facility in Crosby, Tex. (U.S. Chemical Safety Board)

The U.S. Chemical Safety Board on Monday released stark photos of the scorched remains of containers at the Arkema chemical plant in Crosby, Tex., that burned in the aftermath of Hurricane Harvey.

Two of the photos show the skeletal remains of three shipping-size containers covered with ash near the edge of the Arkema facility. Another shows a container burned beyond recognition in front of a charred warehouse.

The fires and explosions ignited after the Arkema plant lost power and

when its backup diesel generators failed in flooding that reached six feet in depth. The plant had stored chemical compounds known as organic peroxides, which explode or burst into flames if they are not refrigerated.

Energy and Environment newsletter

The science and policy of environmental issues.



A CSB spokeswoman, Hillary Cohen, also said Monday that the plant's multiple diesel generators had been placed on concrete pads that varied slightly, but which were roughly two feet high, not nearly enough to survive the unusual flooding.

During the accident at Arkema, people were told to stay at least 1.5 miles from the plant. The company evacuated its employees and then it was a matter of waiting helplessly as the chemicals warmed up. The fires sent towering black smoke high in the air; it could be seen for miles around.

A team of CSB investigators has been on the Arkema site for two weeks, and the agency expects the team to continue its investigation for several more weeks. The board has been documenting the site with photos, and collecting samples and evidence. The team has conducted interviews with Arkema employees and is working to construct a timeline of the events before the fires and explosions.



A trailer that contained organic peroxide products that burned during the fires at the Arkema facility in Crosby, Tex. (U.S. Chemical Safety Board)

Days after the fires, a group of first responders who had been assigned to monitor the 1.5-mile perimeter of the evacuation area around the Arkema chemical plant sued the company, claiming that they had been unprepared for the wave of smoke that had left them womiting and gasping for air in the middle of the road.

In their lawsuit, the responders allege that the plant owner, Arkema, downplayed the dangers of exposure to the fire and failed to adequately

warn responders to move farther away from the fumes after the first of nine trailers full of volatile organic peroxide caught fire. Emergency personnel who arrived on scene allegedly also became ill, in a scene that the lawsuit describes as "nothing less than chaos."

In recent days, others have joined the lawsuit, including some local residents affected after Arkema intentionally ignited the remaining containers of chemicals on Sept. 3, sending additional plumes of smoke that were visible for miles.

"Debris fell all around (well outside the arbitrary perimeter) on people, their homes, their yards, their animals, their property, and their children," lawyers argued in a recent petition, adding more plaintiffs to the case. "More people became exposed to the fumes, and those that had been previously exposed were still trying to recover from the physical limitations they suffered days prior."